



Texas Oak Wilt Suppression Project

1988 - 2013

**Ronald F. Billings
Texas A&M Forest Service
September 2013**

Oak Wilt in Texas



*Veinal necrosis
on live oak*

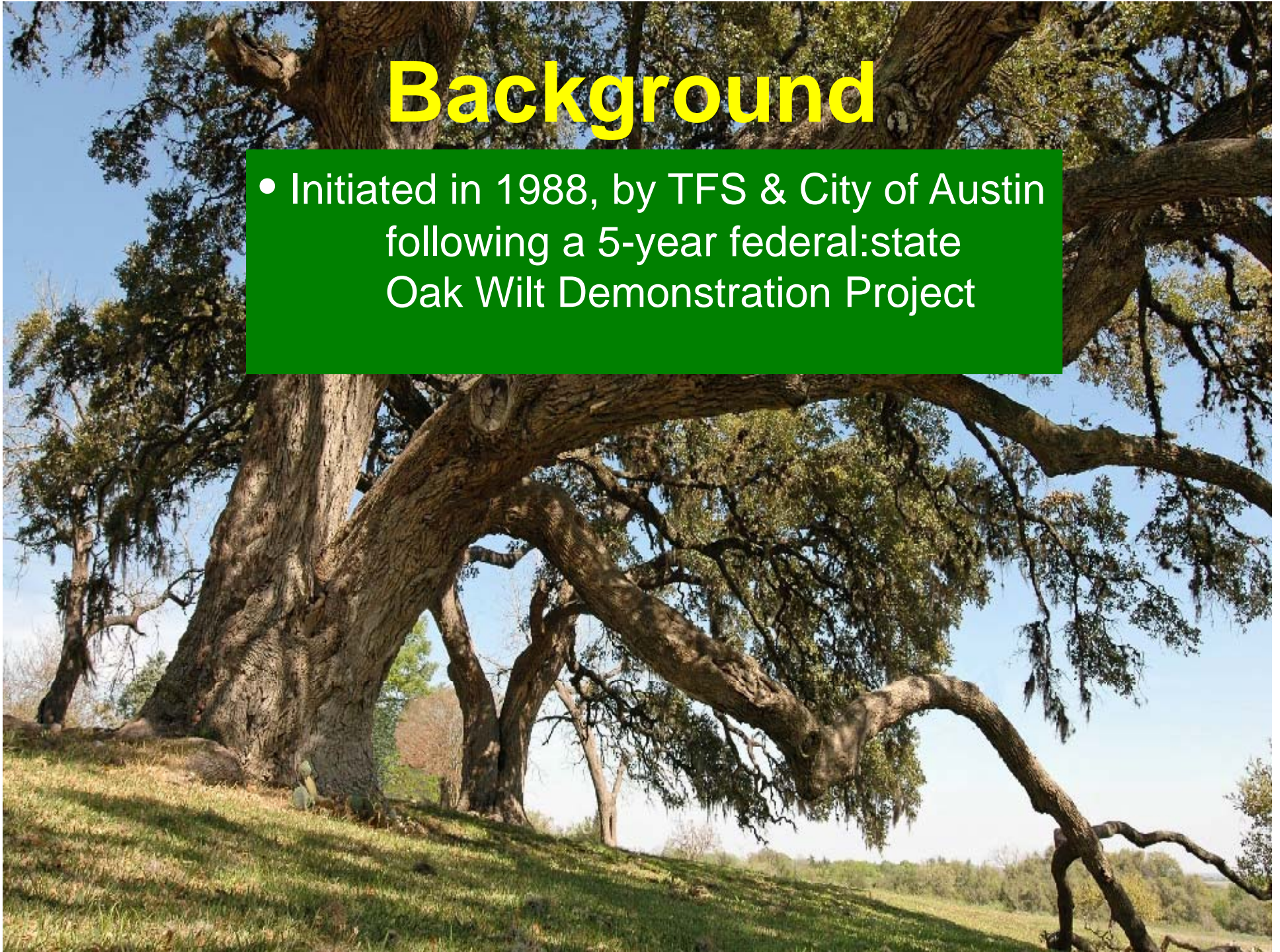
- Oak wilt first identified in Texas in Dallas in 1961
- Prior to mid-1970s, live oak mortality in Central Texas was attributed to other causes
- Live oaks and red (Spanish) oaks are most severely affected by oak wilt
- Only red oaks produce fungal mats
- Most tree losses occur from pathogen spread through interconnected root systems (common in live oaks) or root grafts.



Oak wilt fungal mat on red oak

Background

- Initiated in 1988, by TFS & City of Austin following a 5-year federal:state Oak Wilt Demonstration Project



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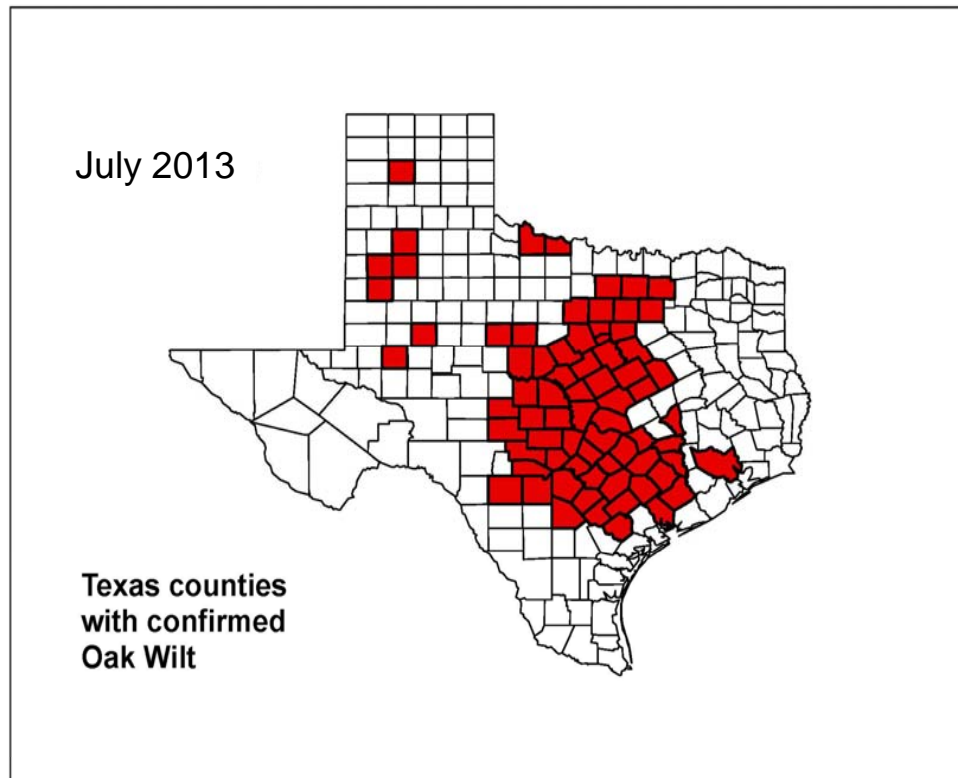
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- TFS staff in 1988 = one forester in Austin, urban foresters in Fort Worth and San Antonio.

Distribution of Oak Wilt in Texas



- **67 counties in Central Texas**
- **7 counties in West Texas**

Counties in Texas with oak wilt cover an area larger than VT, NH, MA, CT, NJ, RI and MD combined.

Oak Wilt Project Administrators

College Station - 2013

TFS Project Supervisors



Tom Boggus
State Forester



Bill Oates
Project Director



Dr. Ron Billings
Administrative Coordinator

TFS Project Support Staff



Dr. Brad Barber
Technology Program Manager



Sharon Klinker
FRD Business Coordinator



Aldyth Lewis
FRD Office Associate

Oak Wilt Project - TFS Staff in Central Texas

2013



Jim Rooni
Regional Forester, Austin



Michelle Gonzales
FRD Business Associate, Austin



James Houser
Regional Forest Health Specialist
Austin



Rachel McGregor
Staff Forester I, Granbury



Renee Burks
Staff Forester II, Hamilton



Eric Beckers
Staff Forester II, Austin



Robert Edmonson
Biologist III, Johnson City



Mark Duff
Staff Forester II, San Antonio



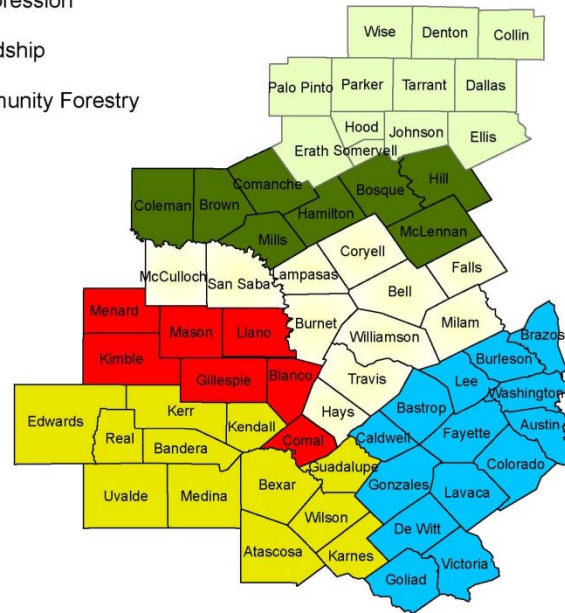
Daniel Lewis
Staff Forester II, La Grange



Central Texas FRD & SF Programs

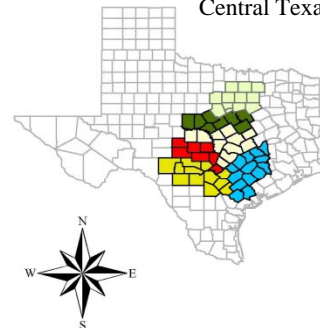
Regional Coverage Areas

- Oak Wilt Suppression
- Forest Stewardship
- Urban & Community Forestry



- Hamilton Region
- Austin Region
- Johnson City Region
- Kerrville Region
- LaGrange Region
- Granbury Region

Texas A&M Forest Service
Central Texas Region



Oak Wilt Technical Coordinators

- 1988 - 1991 Dr. Scott Cameron



- 1991 - 1998 Gene Gehring



- 2000 - 2005 Kim Camilli

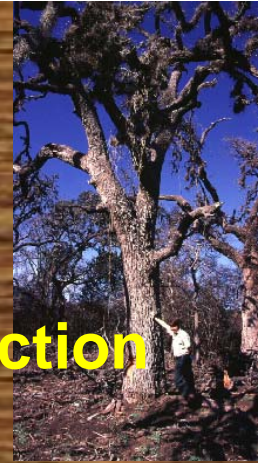


- 2006 - Present James Houser



Cooperators

- **USDA Forest Service/ Forest Health Protection**
- **Cities, neighborhoods, private landowners**
- **Texas A & M AgriLife Extension Service**
- **Lady Bird Johnson Wildflower Center**
- **Master Gardeners/Master Naturalists**
- **ISA Certified Arborists**



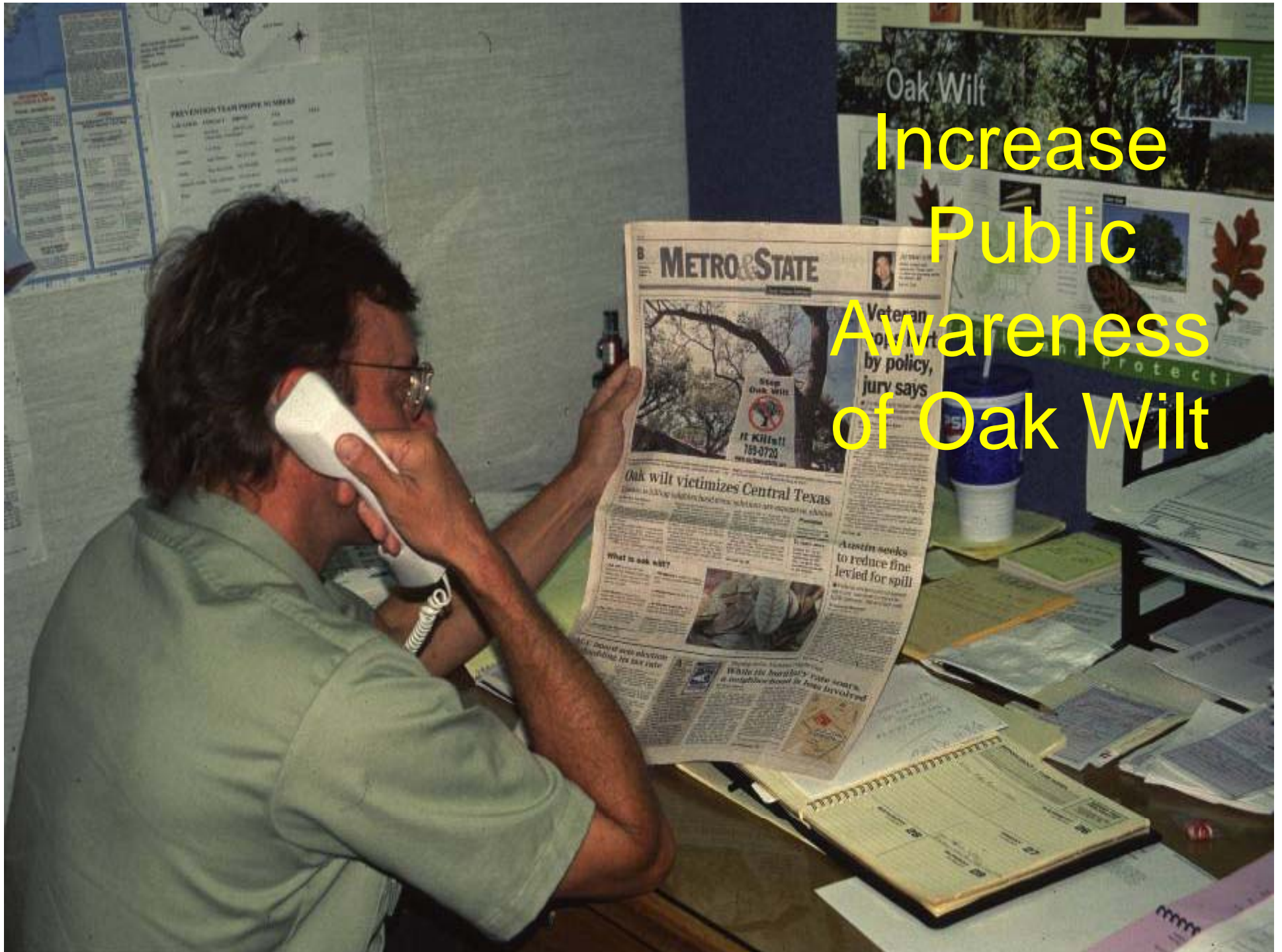


**Dr. David Appel, Texas A&M University Forest Pathologist
Provides Technical Expertise**



Project Objectives

- **Increase public awareness about oak wilt**
- **Detection and evaluation of oak wilt centers**
- **Provide technical assistance to landowners**
- **Offer cost shares for oak wilt control**
- **Train oak wilt specialists**
- **Develop and implement strategic plan**



Increase
Public
Awareness
of Oak Wilt



Deal One-on-one with Affected Property Owners

KNOLLWOOD

**Stop
Oak Wilt**

It Kills!!
789-0720
www.northwesthills.org





Oak Wilt Web Page

Since 2003

A cooperative project involving:

- Lady Bird Johnson Wildflower Center
- Houston Advanced Research Center
- National Biological Information Infrastructure
- Texas A&M Forest Service
- USDA Forest Service, Forest Health Protection
- ISA, Texas Chapter

<http://texasoakwilt.org/>

<http://texasoakwilt.org>



Over 28,000 unique visitors and 86,000 page views from July 2012 to July 2013.

TEXAS OAK WILT.ORG



Oak Wilt

Introduction

Get Help

Ways to get assistance

Find a Specialist

Finding help

Tree Stewardship

Caring for your oaks

Image Gallery

Images of Oak Wilt

Professionals

Resources for pros



Texas A&M Forest Service offers high-quality, affordable seedlings

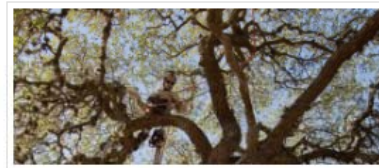
The Texas A&M Forest Service offers high-quality, affordable seedlings to Central Texas landowners undertaking land restoration projects. Visit the West Texas Nursery website to learn more.

Resources



Texas A&M Forest Service offers high-quality, affordable seedlings

Pruning Guidelines



Pruning Guidelines for Prevention of Oak Wilt in Texas

Search this website ...

Search

Latest Tweets

about 15904 days ago

Listed on Web Page as of July 2013

16 Oak Wilt Vendors; 79 Oak Wilt Certified Arborists

TEXAS OAK WILT.ORG



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You are here: [Home](#) / [Find a Specialist](#) / [Vendor Directory](#)

Search this website ...

Search

Vendor Directory

Oak Wilt Vendor Directory links the public with professionals experienced in the diagnosis and treatment of oak wilt disease. If you would like to be added to the vendor directory, please fill out the [new vendor application form](#).

Search Vendors

Name of Vendor:

Services:

Counties Served:

Submit Search

Reset Form

[view all the vendors in the directory](#)

Latest Tweets

about 15906 days ago

Oak Wilt Video Gallery



Name

Location

Phone

ISA Certified Arborist Training



TEXAS
OAK WILT
CERTIFIED



Master Gardener/Master Naturalists



Prevention



State-of-the-art GIS and Data Management Systems



DOQQ Photo Maps of Treatments

TFS 6875

TEXAS FOREST SERVICE
Oak Wilt Suppression Project
Treatment Map



 Trench - August 1999 - 1450'
 Oak Wilt

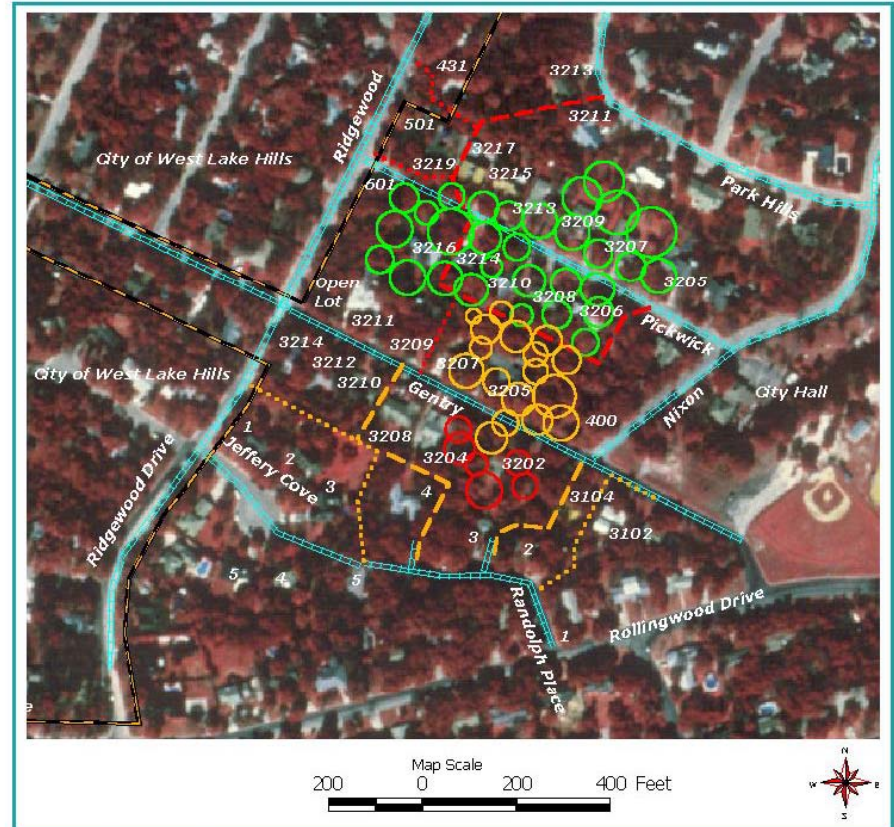
Project: Marcum
County: Hays
Quad: Dripping Springs - NW
Loc: 290W, Bell Springs to Benjie
Prepared By: Eric Beckers
Last Revised: July 18, 2002

TFS Form 6875












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FOREST SERVICE

Oak Wilt Treatment Plan



Map Legend

-  Most Recent Spread - June 01
-  Area of New Spread
-  Previous Oak Wilt
-  2002 Primary Trench Location (52" depth - 980 ft.)
-  2002 Secondary Trench (52" depth - 850 ft.)
-  1998 Trench Locations (42" depth)
-  1994 Trench Locations (36" depth)
-  Utility Trench Locations
-  City Boundary

Project Information

Project Name: City of Rollingwood
Location: Gentry & Randolph
County: Travis County, TX
USGS Quad: Austin West
Latitude: N 30 16' 23"
Longitude: W 97 47' 23"
Prepared by: J. Rooni - TFS Austin
17-July-2002

Barrier Treatments

- Trenching (at least 4 feet deep to halt oak wilt spread through connected root systems)
- Roguing (removal of diseased trees within the trenched area)



Oak Wilt Technical Advisory Board 2013

- **Dr. Dave Appel**, TAMU
- **Dr. Brad Barber**, TFS
- **Dr. Ron Billings**, TFS
- **Carrie Burns**, City of Lakeway
- **Chris Dolan**, City of Austin
- **Gene Gehring**, Urban Renewal
- **Rob Grotty**, City of Austin
- **James Houser**, TFS
- **Dr. Forrest Oliveria**,
US Forest Service/ FHP
- **Jim Rooni**, TFS
- **Dale Starkey**, US Forest Service/FHP
- **Dr. Damon Waitt**, L.B.J.W.C.



In a cooperative effort involving the U.S. Park Service, an oak wilt center was treated on the LBJ Ranch at Stonewall, TX.





Junction, Texas September 25, 2011



The 2011 drought made it difficult to detect and diagnose oak wilt centers.



Junction September 25, 2011



Austin September 25, 2011



Total Trench Accomplishments 1988 - 2012

Centers trenched = 2,772

Feet of trench = 3.9 million feet
(or 739 miles, equivalent to a trench running from Houston to El Paso)

Total cost shares = \$ 2.9 million

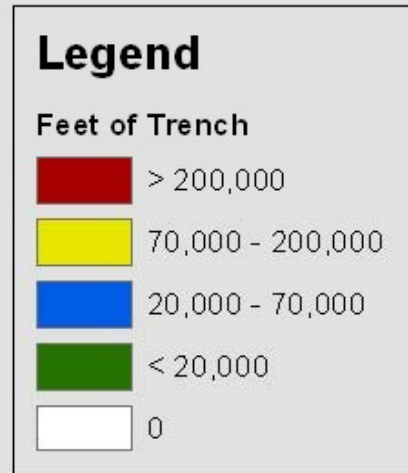
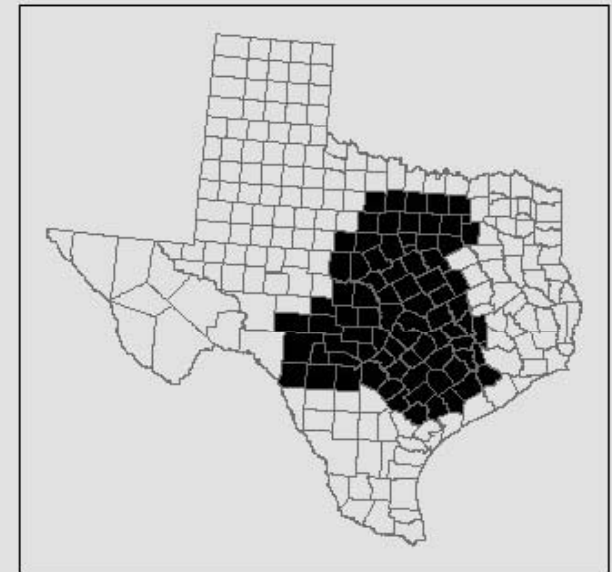
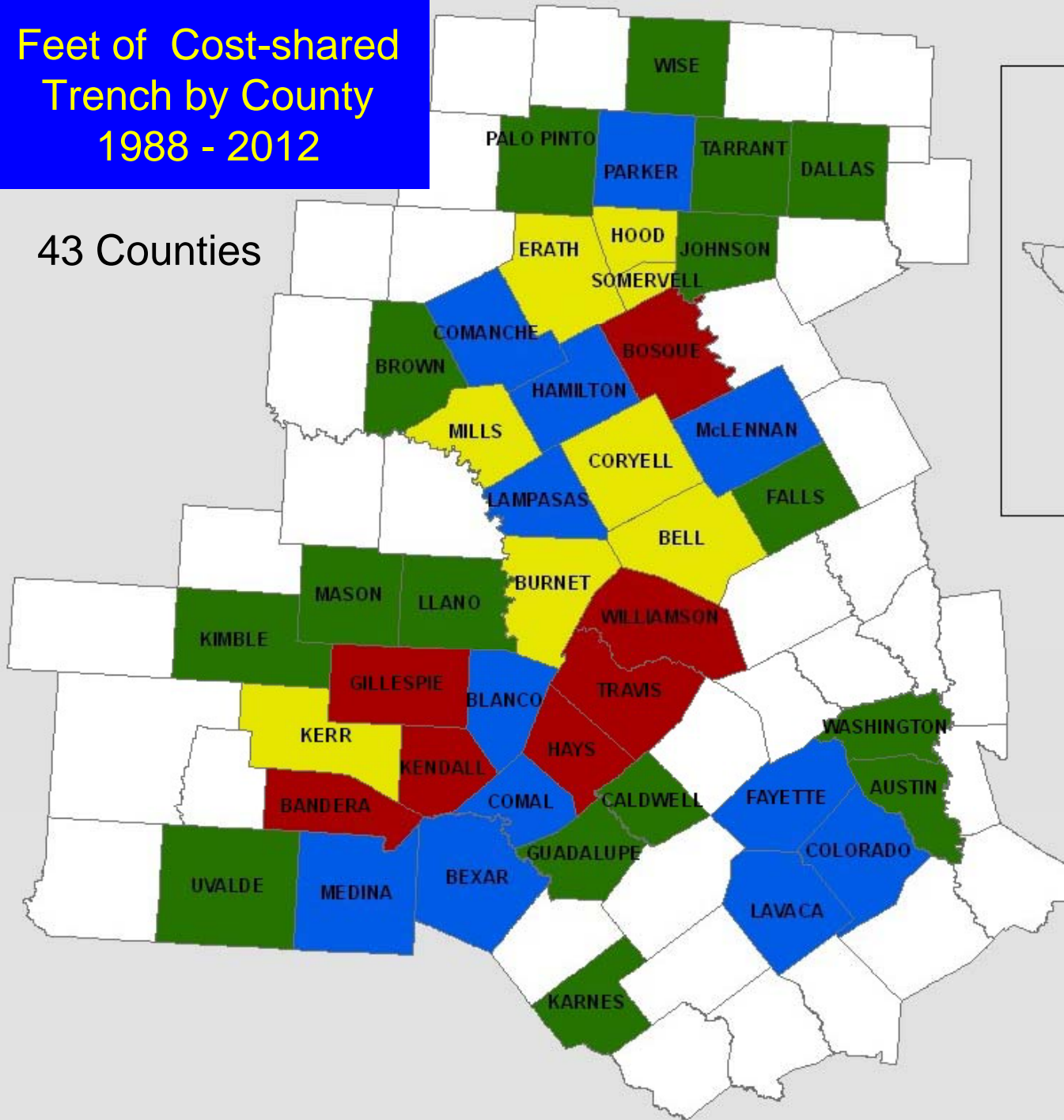
Total costs = \$ 7.4 million

Success of trenches: 65-75%



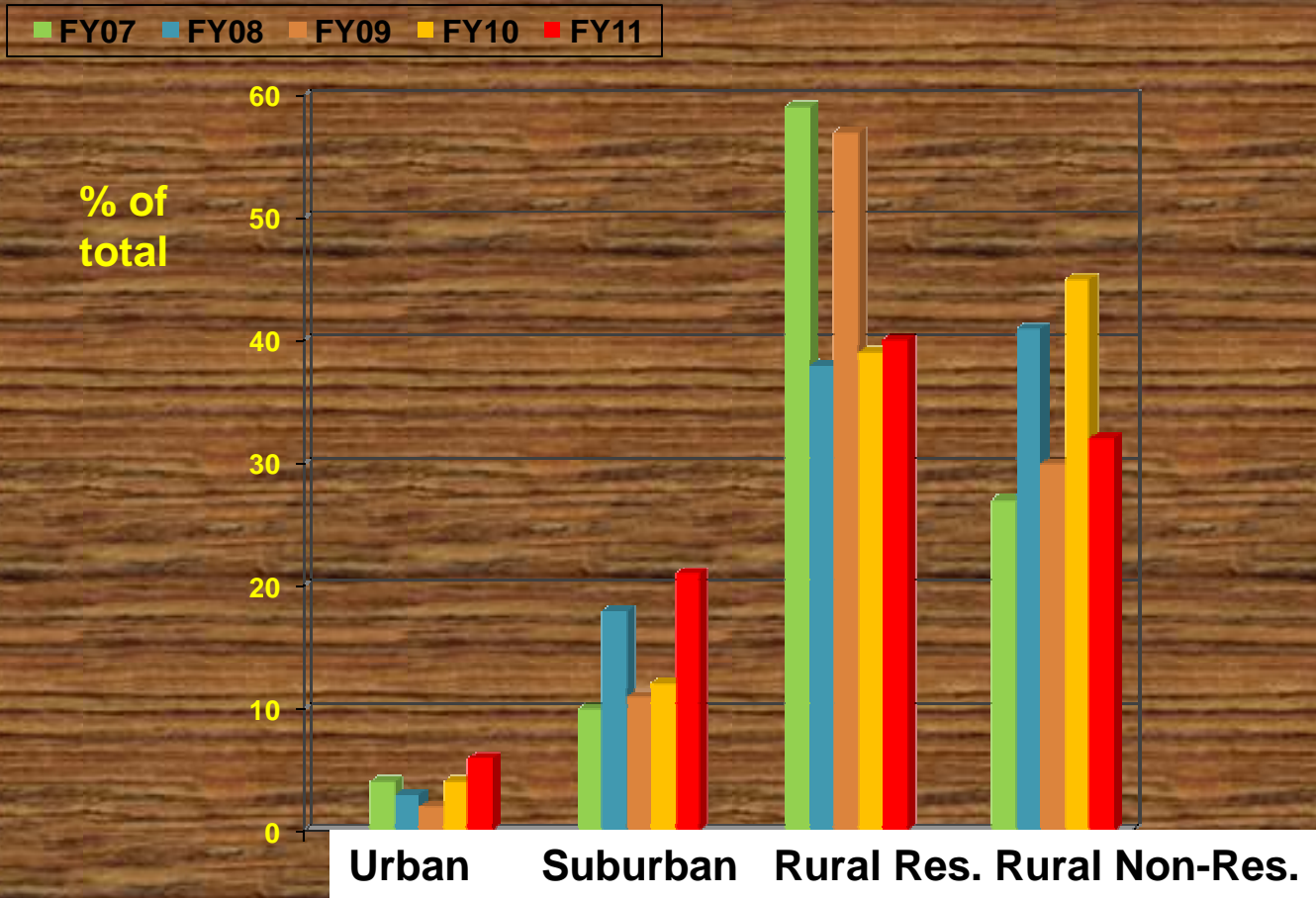
Feet of Cost-shared Trench by County 1988 - 2012

43 Counties



Trenches by Land Use Classification

Texas Oak Wilt Suppression Project



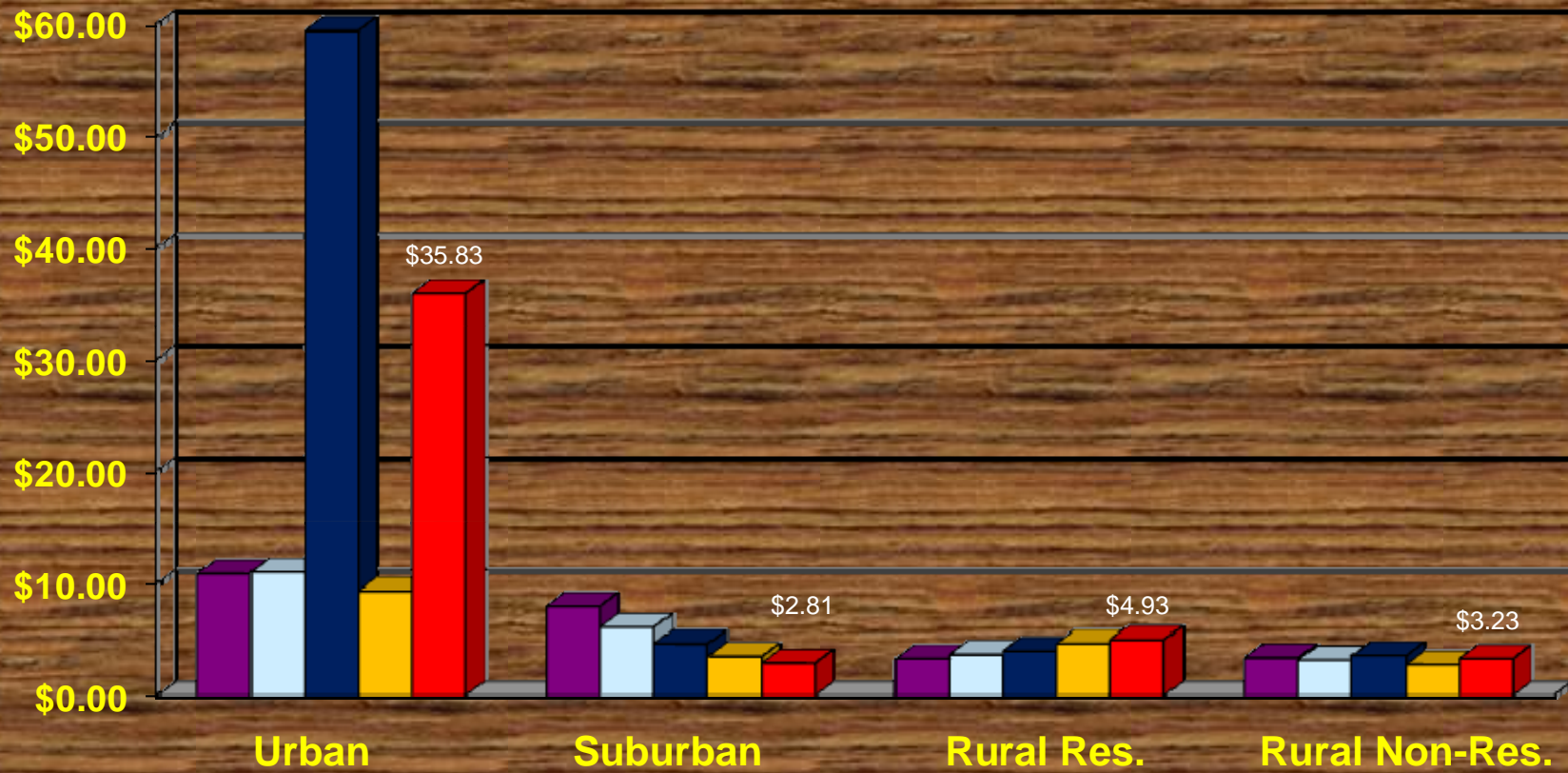
Land Use Classification

Cost-shared trenches only

Cost/Foot of Trenches by Land Use

Texas Oak Wilt Suppression Project

FY07 FY08 FY09 FY10 FY11

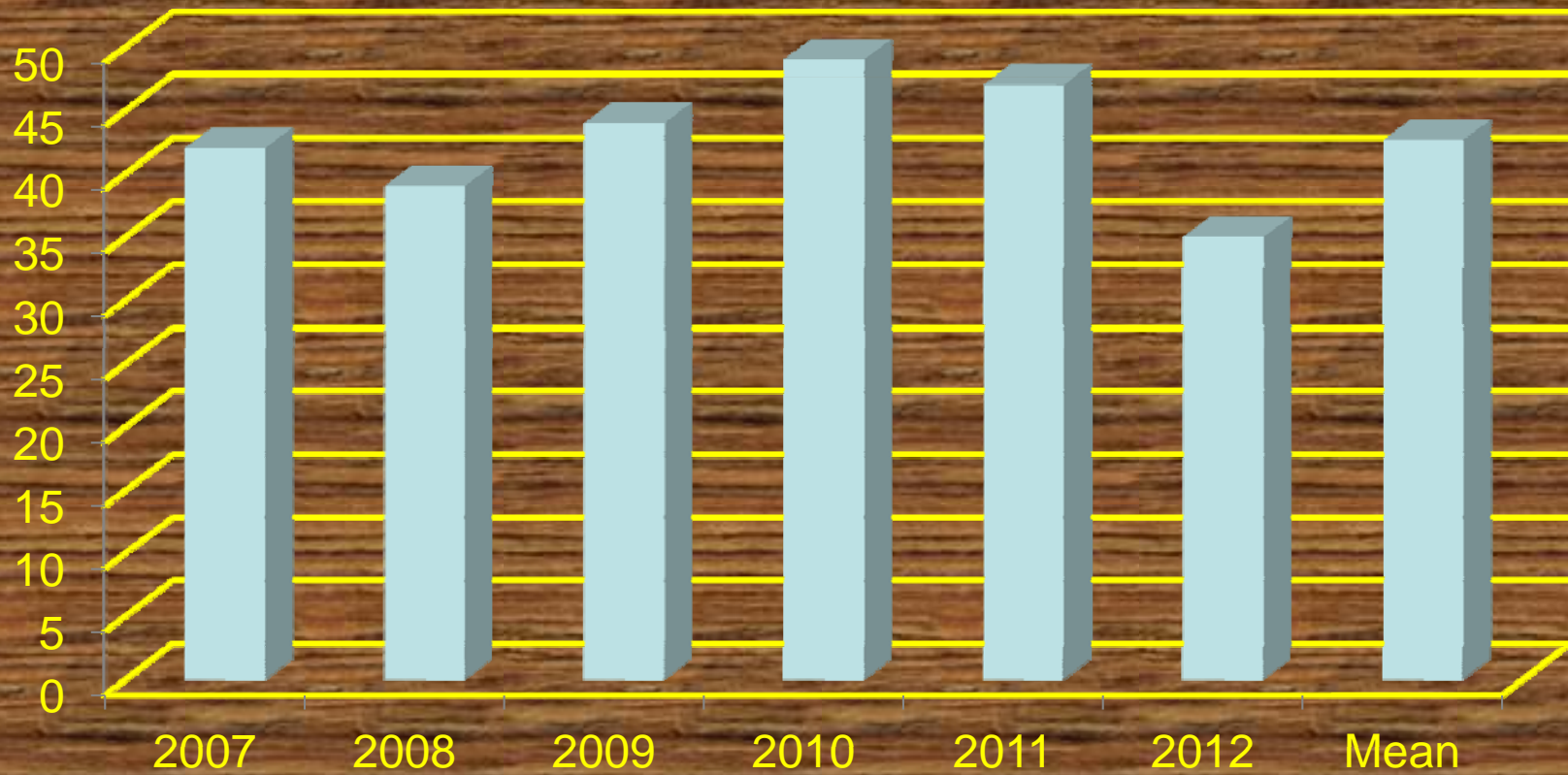


Cost-shared trenches only

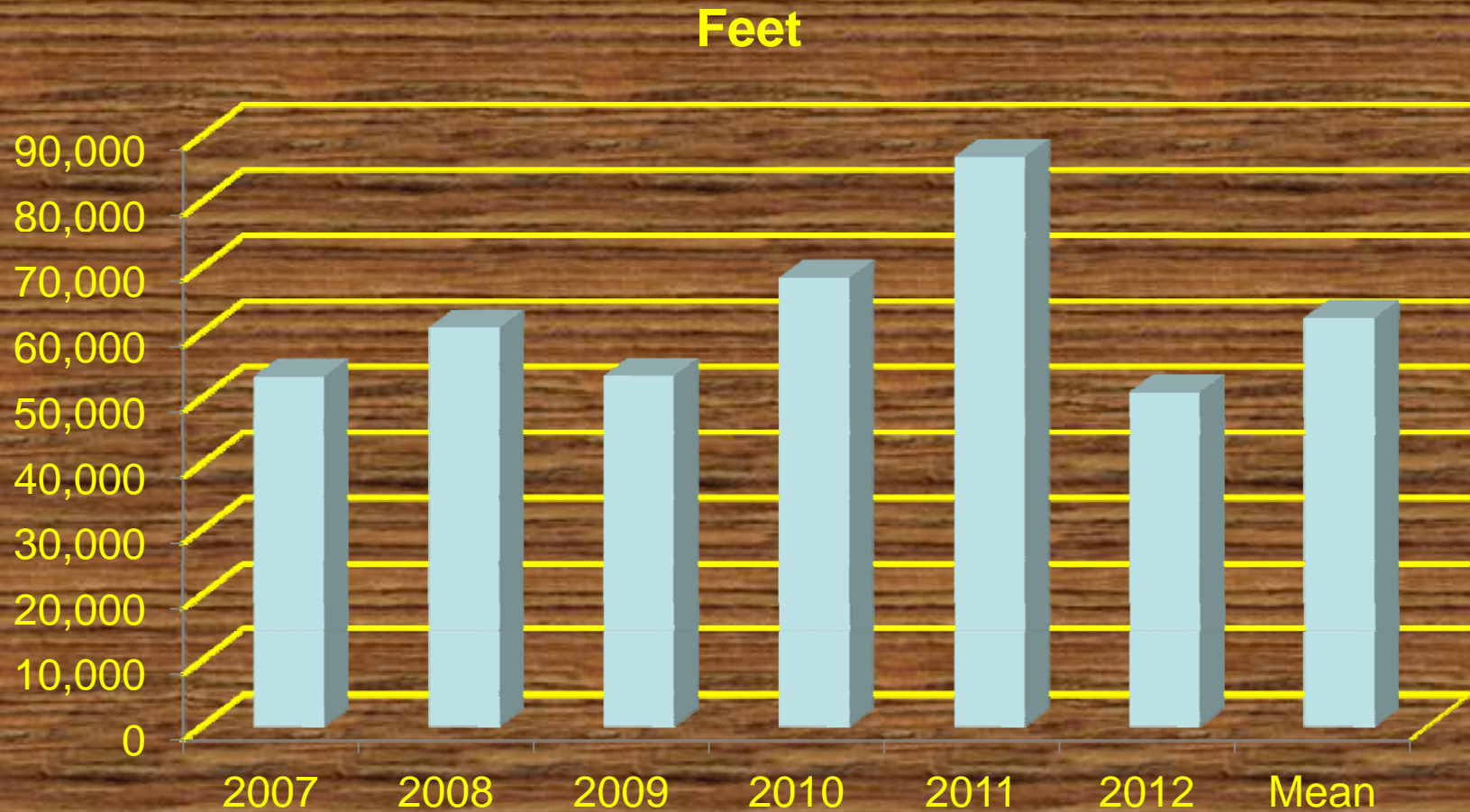
Land Use Classification

Cost-shared Trenches by FFY

Trenches

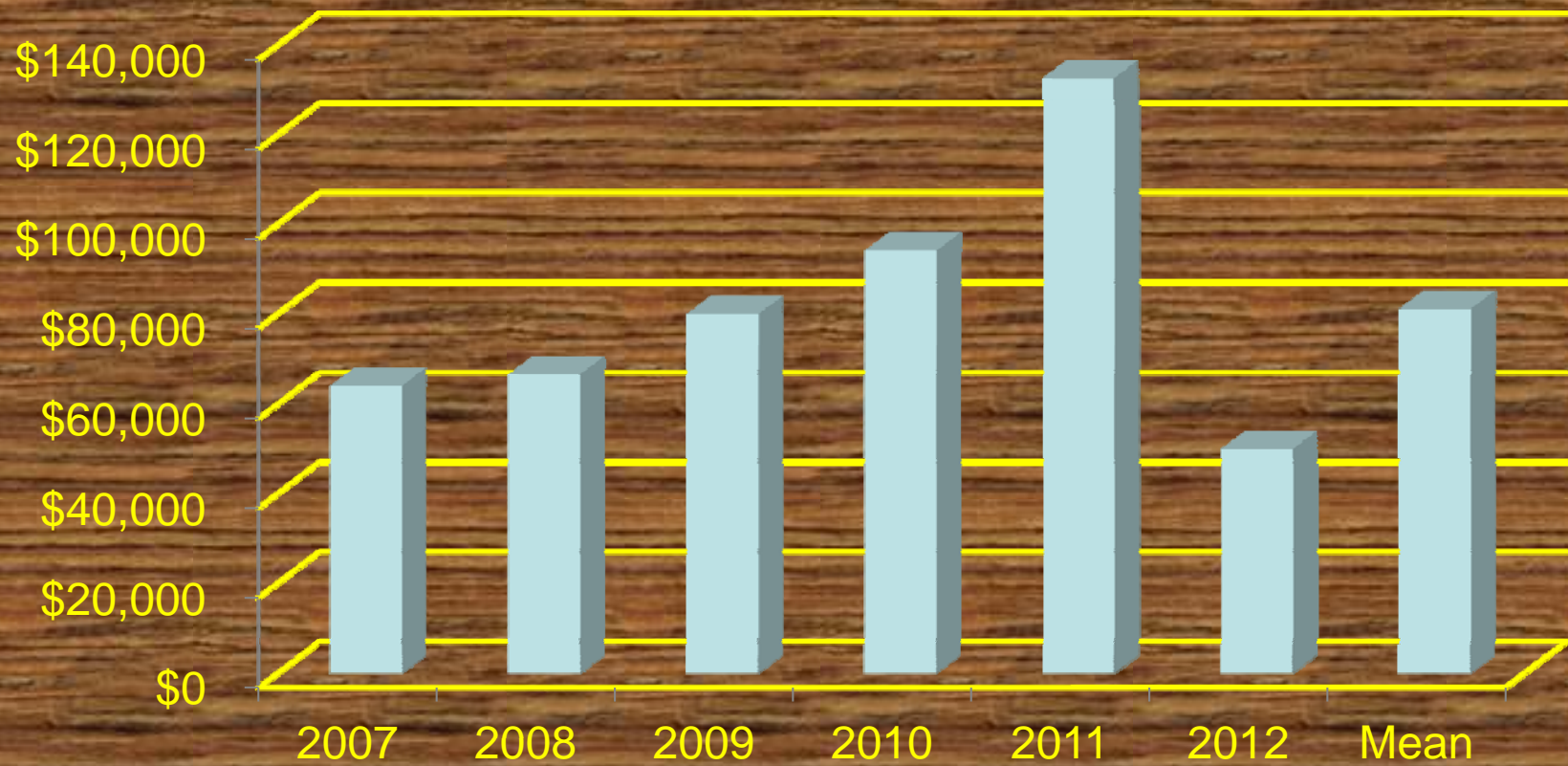


Feet of C.S. Trenches by FFY

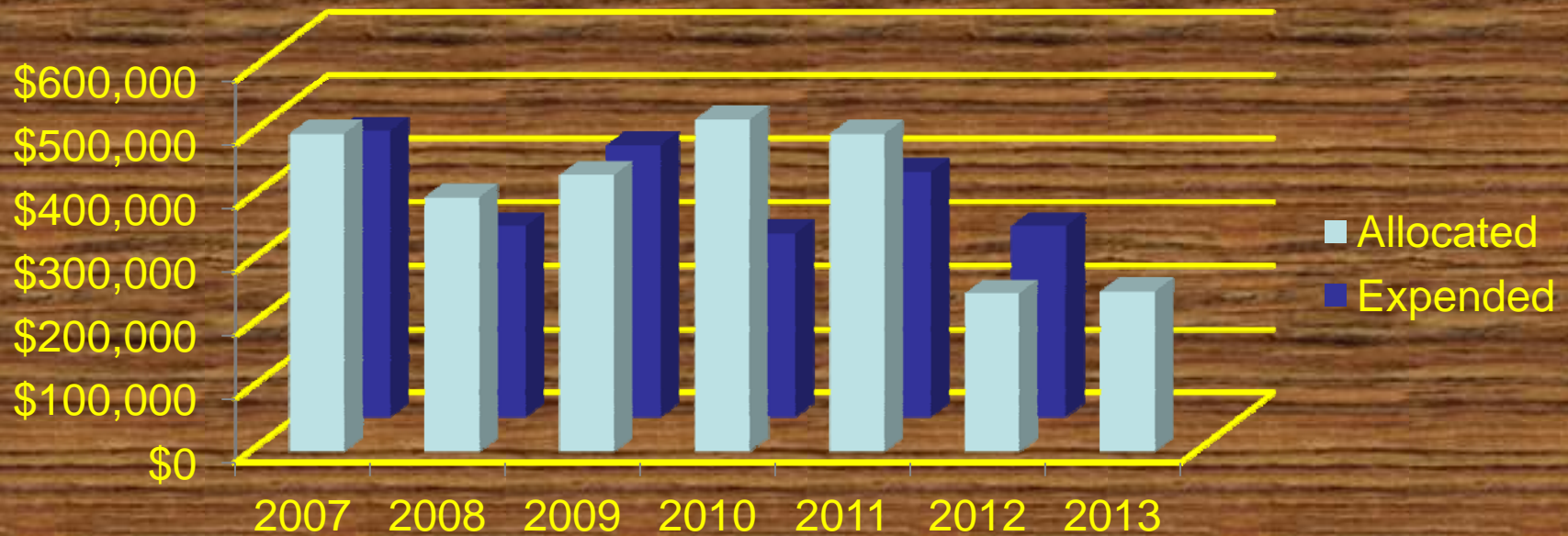


Cost Shares Paid by FFY

Cost Shares Paid



Suppression Project Budgets





Suppression Project Obstacles

- **Lack of State-mandated funding**
- **Small field staff to address a huge problem**
- **Increasing population pressure in rural areas**
- **Demand for staff's time from other programs**
- **Cost of trenching has tripled since 1990**
- **Federal funding cut in half in 2012 and 2013**

Cost-share Rates in FY 2013

40% of total costs, up to:

- **Maximum of \$2,000 for single landowner per ffy**
- **Maximum of \$10,000 for 5 or more landowners**

About Oak Wilt

- Oak wilt impact has increased with a rapidly-increasing population, property fragmentation, and urban sprawl.

From 1980 to 2010, the population of Texas as a whole rose from 14.2 million to over 25 million, or about 77% percent.

The five-county Austin-Round Rock-San Marcos area led the state in 30-year growth, with a population increase of more than 193 percent.





Coordination with other TFS Programs

Oak Wilt Program

Stewardship Program

Forest Health

Invasive Species
EAB Trapping
Firewood Awareness

Urban Forestry Program

Woodlands, Cross Timbers,
and Drought Recovery
Redesign Initiatives





Long-range Strategic Plan

- Pursue integrated approach to pest management
- Identification of priority areas, partnerships
- Empower more cities & communities to address oak wilt
- Involve and train volunteer groups to assist with Project goals
- Plant resistant trees; diversify landscapes
- Increase state funding

Thanks
for your
attention.



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